

**UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

GLOBAL EQUITY MANAGEMENT)
(SA) PTY. LTD.,) Case No. 2:16-cv-00095-RWS-RSP
Plaintiff,)
) LEAD CASE
v.)
)
EXPEDIA, INC. ET AL.

DECLARATION OF CRAIG ROSENBERG, Ph.D.

1. My name is Craig Rosenberg. I am over the age of 21. I have never been convicted of a felony, and I have personal knowledge of the facts contained herein, which are true and correct. If called as a witness, I could competently testify to these statements.

2. I provide the following opinions for Global Equity Management (SA) Pty. Ltd. ("GEMSA").

3. I am being compensated for my time in this proceeding at my standard consulting rate of \$432/hr. My compensation is based on the hours I spend on the matter and not the result.

4. I am aware that GEMSA has filed lawsuits alleging various defendants infringe at least claims 1, 16, and 28 of United States Patent No. 6,690,400 ("the '400 patent") and at least claims 1, 3, and 6 of United States Patent No. 7,356,677 ("the '677 patent"). I have been informed that the claims of the '400 patent and the claims of the '677 patent are to be defined by the Court and that as part of the process to define the claims defendants have submitted the Declaration of Richard M. Goodin.

5. I have been asked to provide my opinions as to what certain claim terms of the '400 patent and the '677 patent mean to a person of ordinary skill in the art and to opine on the Declaration

of Richard M. Goodin.

INTRODUCTION

6. Exhibit 3 is a copy of my current curriculum vitae (“CV”), which includes my relevant work history. I have 28 years as a systems and software engineer specializing in analysis and design of mobile computing devices, complex systems, user centered design, information architecture, user experience, systems and software engineering, object oriented analysis, and modeling and simulation.

7. In the past five (5) years I have testified in the following matters:

- *Silver State Intellectual Technologies v. Foursquare*, IPR2014-00159 (deposition)
- *Silver State Intellectual Technologies v. Garmin*, District of Nevada, 2:11-cv-01578-PMP-PAL (deposition and trial testimony)
- *Select Retrieval v. Overstock*, District of Delaware, 1:11-cv-00812-RGA (deposition)
- *Location Labs v. Locatio.net*, IPR2014-00199 (deposition)
- *Intellectual Ventures v. Google*, IPR2014-00787 (deposition)
- *FTC v. Amazon*, 2:14-cv-01038-JCC (deposition)
- *Valmont v. Lindsay*, IPR2015-01039 (deposition)
- *Ford Class Action*, 13-cv-3072-EMC (deposition)
- *BeUbiq v. Curtis Consulting Group*, 1-14-cv-270691 (deposition and trial testimony)
- *Edulog v. DML*, DV-06-1072 (deposition)

8. Since 1996, I have been with Global Technica, an advanced engineering consulting and software development company. Currently I hold the position of CEO. The company provides systems design, development, and project management in the areas of custom software development, human factors engineering, user interface design, and simulation for a wide range of advanced commercial and military programs, as disclosed in my CV.

9. Over the past 28 years I have worked with and gained knowledge directly related to computer systems performing emulation, simulation and virtualization and I understand the differences between the terms. One of ordinary skill in the art would understand, using definitions from computer science at the time of the date of invention of the ‘400 patent and the ‘677 patent,

would understand:

- a. the term emulation is to replicate or imitate (Dos emulation on MS Windows);
- b. the term simulation is to model or reproduce (weather forecast by simulation); and,
- c. the term virtualization is to create or produce (multiple OS environments on a server).

10. A more detailed description of my work experience and other qualifications can be found in my CV, which is attached as Exhibit 3 to this declaration.

LEVEL OF ONE OF ORDINARY SKILL IN THE ART

11. I have been informed that the level of one of ordinary skill in the art at the time of filing of the ‘400 patent and the ‘677 patent is a relevant factor for defining the claims. I understand that a person of ordinary skill in the art is a hypothetical person who is presumed to have known the relevant art (information) at the time of the invention, here the filing date of the ‘400 patent and the ‘677 patent. Factors that may be considered in determining the level of ordinary skill in the art may include: (A) “type of problems encountered in the art;” (B) “prior art solutions to those problems;” (C) “rapidity with which innovations are made;” (D) “sophistication of the technology; and” (E) “educational level of active workers in the field.

12. I was informed that the date of invention for the ‘400 Patent is September 29, 1999 and the date of invention for the ‘677 Patent is October 19, 2001.

13. In my opinion, a person of ordinary skill in the art as of September 29, 1999 would have had a bachelor’s degree in computer science, computer engineering, human factors, or highly related field, and would have had at least four years’ experience in software development, especially user interfaces.

14. In my opinion, a person of skill in the art as of October 19, 2001 would have had a bachelor’s degree in computer science, computer engineering, or the equivalent, and would

have had bachelor's degree in computer science, computer engineering, or highly related field, and would have had at least four years' experience in designing computer operating systems.

THE '400 PATENT

15. The summary of the '400 Patent specifies that the invention of the '400 patent is a graphic user interface that enables a user to virtualize a computer system and to define secondary storage physical devices, in single or multiple super operating system environments.¹ The Abstract of the '400 patent provides that the invention is a graphic user interface that enables a user to virtualize computer operating systems and to define secondary storage physical devices through the graphical depictions of cabinets.² In my opinion, the '400 patent claims a graphic user interface for displaying virtualized storage devices of an operating system independent storage virtualization system.

16. Claim 1 of the '400 patent provides:

A graphic user interface for displaying *means for allocating a computer device's resources to multiple operating system environments, partitioned on individual virtual cabinets, on said computer device*, said graphic user interface comprising: a main menu bar; a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet; each said at least one virtual cabinet representing a discrete operating system; a secondary storage partitions window; a cabinet visible partition window; said secondary storage partitions window graphically illustrating at least one partition of at least one secondary storage device; said cabinet visible partition window graphically illustrating a cabinet record corresponding to a selected virtual cabinet on said cabinet selection button bar; and each said at least one cabinet visible partition window representing an operating system plus application software, databases and memory configured with said selected virtual cabinet.³

17. Richard Goodin, Defendant's expert, opined that the '400 patent does not provide an algorithm to perform the function of "allocating a computer device's resources to multiple operating

¹ Ex. 1, the '400 patent at Column 3, lines 29-33 ("3:29-33").

² Id. at Abstract.

³ Id. at Claim 1 (emphasis added).

system environments, partitioned on individual virtual cabinets, on [a] computer device.”⁴ In reaching his opinion that no algorithm is disclosed he declared that he looked for an algorithm expressed in any form but was unable to locate one.⁵

18. Mr. Goodin further opined that the emphasized phrase “means for allocating a computer device's resources to multiple operating system environments, partitioned on individual virtual cabinets, on said computer device” does not connote a definite, particular structure for performing the recited function to one of ordinary skill in the art⁶ and that the function disclosed could not be performed on a general purpose computer⁷.

19. To analyze Mr. Goodin’s opinions as expressed in paragraphs 32-36 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the ‘400 patent specification.

20. Starting with the language of Claim 1 of the ‘400 patent, the claimed GUI is for “displaying.” I further note substantial structure is disclosed in the body of the claim, including:

- a. a main menu bar;
- b. a cabinet selection button bar;
- c. a secondary storage partitions window; and,
- d. a cabinet visible partition window.⁸

⁴ Ex. 4, Declaration of Goodin at ¶s 28-34.

⁵ Id. at ¶ 33.

⁶ Id. at ¶ 35.

⁷ Id. at ¶ 36.

⁸ Ex. 1, the ‘400 patent at 8:62-9:18.

I further note that the claim language specifically states that the “cabinet selection button bar graphically represent[s] at least one virtual cabinet”⁹ and that each “at least one virtual cabinet represent[s] a discrete operating system.”¹⁰

21. In reviewing the specification of the ‘400 patent, I note that first paragraph of the detailed description provides:

The Graphic User Interface ("GUI") of the present invention enables a user to allocate and manage the resources of a computer system by defining one or more cabinets, each cabinet containing one or more partitions of one or more existing software and/or data. Examples of such existing software includes operating systems ("OS"), OS dependent programs and No-OS (self-contained, embedded OS) programs. This resource allocation and management is performed graphically with a pointing device and/or keyboard, and is referred to as Flash Vos GUI 10 or FVOS GUI 10 for short. FVOS GUI 10 also allows users to tailor the computer system to be managed locally or remotely, manipulate and share partitions, cabinets and files and their characteristics or operating environments. For the purposes of this invention and disclosure, the terms "Virtual Cabinet", "Cabinet Record" and "cabinet" are synonymous. A cabinet is defined herein as a virtual storage device, capable of containing, typically through the use of virtual table of content pointers, all (or partitions of) shared (or non-shared) operating systems, application software (both OS dependent and No-OS embedded), databases and memory. This invention provides, inter alia, means for manipulating cabinets. This manipulation comprises adding partitions, deleting partitions, naming the cabinet, assigning an icon to the cabinet, configuring partitions in the cabinet, defining user access, defining remote management functions and booting the cabinet.¹¹

Further a natural language algorithm is provided:

As stated above, Cabinet Button 21 depicts an active cabinet, whose contents, which may include operating systems, partitions, software and data, can be manipulated (added, removed, renamed, relocated in memory) by FVOS GUI 10. The contents of the active cabinet are depicted in 5 FIG. 8 in Active Selected Cabinet Visible Partition Window 90. The contents of the all secondary storage devices found in the computer system are depicted in Secondary Storage Partitions Window 80 as Secondary Storage Icon 180 and Secondary Storage Text Descriptor 186. The partitions of 10 each secondary storage device are depicted with icons 180 and text descriptors 181, viewable through content button expanders 182. The partitions can be virtually copied from the secondary storage to the active cabinet by an input device operation, such as "click and drag" movement using 15 a pointer

⁹ Ex. 1 at 9:2-3.

¹⁰ Ex. 1 at 9:4-5.

¹¹ Ex. 1 at 5:9-35.

device such as a mouse, or by double clicking using such pointer device. The pointer device is placed over either icon 180 or text descriptor 181 in Secondary Storage Partitions Window 80, and the "click and drag" or double clicking operation of the pointer device places the partition 20 described by icon 180 and text descriptor 181 into the active cabinet. As depicted in FIG. 9, the partition can be removed from the active cabinet by "right clicking" a pointer device over the selected partition, evoking cabinet button 190, and selecting Remover 93. In the preferred embodiment, the 25 Configuration View shown in FIG. 10 allows for the same functions without being limited to the Selected Cabinet.¹²

Therefore, directly from the language of the specification, one of ordinary skill in the art would see that "one or more cabinets" are created that contain one or more partitions for display on the GUI.

22. From reading the '400 patent, a cabinet is a virtual storage device capable of containing virtualized operating systems, application software, databases and memory, or partitions of any of the preceding (operating systems, application software, databases, and memory).¹³ One of ordinary skill in the art would understand a virtual representation as a graphical representation.

23. Therefore, one of ordinary skill in the art would understand that the structure for "means for allocating a computer device's resources to multiple operating system environments, partitioned on individual virtual cabinets, on said computer device" is a virtual storage device (e.g. a graphical representation). Accordingly, structure is disclosed for performing the function as recited in the claims, namely a virtual storage device that is depicted as a graphical representation. The virtual storage device is displayed on the GUI and may contain virtualized operating systems, application software, databases and memory, or partitions of any of the preceding (operating systems, application software, databases, and memory).

24. Further, one of ordinary skill in the art could create the graphic representation of the cabinet and display it on the GUI from the teaching of the '400 patent, the '677 patent and the '183 patent. Namely, the '400 patent references prior art systems and programs for creating and

¹² Ex. 1 at 7:1-32.

¹³ Ex. 1 at Abstract; 3:1-5; 2:40-52; 5:9-29.

displaying subentities.¹⁴ Accordingly, on September 29, 1999, one of ordinary skill in the art would be able to create a graphic representing a virtual storage device based on the teachings of the ‘400 patent.

25. Claim 16 of the ‘400 patent provides:

A graphic user interface for displaying *means (sic) for allocating a computer device's resources to at least one operating system on said computer device*, said graphic user interface comprising: a secondary storage partitions window for graphically illustrating each of at least one partition of at least one secondary storage device for each of at least one operating systems on said computer; means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window; a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; a cabinet visible partition window for graphically illustrating a selected virtual cabinet record; means for manipulating said at least one cabinet record through said cabinet visible partition window; said cabinet visible partition window graphically illustrating an operating system plus application software, databases and memory configured with said selected virtual cabinet; and means for modifying said at least one cabinet record through said cabinet visible partition window.¹⁵

26. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.¹⁶ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.¹⁷

27. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 37-40 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification.

¹⁴ Ex. 1 at 3:13-26.

¹⁵ Ex. 1 at 9:66-10:25 (emphasis added).

¹⁶ Ex. 4 at ¶s 37-38.

¹⁷ Ex. 4 at ¶s 39-40.

28. Starting with the language of Claim 16 of the ‘400 patent, the claimed GUI is for “displaying.” I further note substantial structure is disclosed in the body of the claim, including:

- a. a cabinet selection button bar;
- b. a secondary storage partitions window; and,
- c. a cabinet visible partition window.¹⁸

I further note that the claim language specifically states that the “cabinet selection button bar graphically represent[s] at least one virtual cabinet”¹⁹ and that each “at least one virtual cabinet represent[s] a discrete operating system.”²⁰

29. In reviewing the specification of the ‘400 patent, I note that first paragraph of the detailed description, as noted in paragraph 21 of this declaration. Further a natural language algorithm is provided as illustrated in paragraph 21 of this declaration. Therefore, directly from the language of the specification, one of ordinary skill in the art would see that “one or more cabinets” are created that contain one or more partitions for display on the GUI.

30. From reading the ‘400 patent, a cabinet is a virtual storage device capable of containing virtualized operating systems, application software, databases and memory, or partitions of any of the preceding (operating systems, application software, databases, and memory).²¹ One of ordinary skill in the art would understand a virtual representation as a graphical representation.

31. Therefore, one of ordinary skill in the art would understand that the structure for “moans (sic) for allocating a computer device's resources to at least one operating system on said computer device” is a virtual storage device (e.g. a graphical representation). Accordingly, structure is disclosed for performing the function as recited in the claims, namely a virtual storage device that

¹⁸ Ex. 1 at 9:66-10:25.

¹⁹ Ex. 1 at 10:11-13.

²⁰ Ex. 1 at 10:14-15.

²¹ Ex. 1 at Abstract; 3:1-5; 2:40-52; 5:9-29.

is depicted as a graphical representation. The virtual storage device is displayed on the GUI and may contain virtualized operating systems, application software, databases and memory, or partitions of any of the preceding (operating systems, application software, databases, and memory). Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

32. Further, one of ordinary skill in the art could create the graphic representation of the cabinet and display it on the GUI from the teaching of the ‘400 patent, the ‘677 patent and the ‘183 patent. Namely, the ‘400 patent references prior art systems and programs for creating and displaying subentities.²² Accordingly, on September 29, 1999, one of ordinary skill in the art would be able to create a graphic representing a virtual storage device based on the teachings of the ‘400 patent.

33. Claim 16 of the ‘400 patent further provides:

A graphic user interface for displaying means (sic) for allocating a computer device's resources to at least one operating system on said computer device, said graphic user interface comprising: a secondary storage partitions window for graphically illustrating each of at least one partition of at least one secondary storage device for each of at least one operating systems on said computer; **means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window**; a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; a cabinet visible partition window for graphically illustrating a selected virtual cabinet record; means for manipulating said at least one cabinet record through said cabinet visible partition window; said cabinet visible partition window graphically illustrating am operating system plus

²² Ex. 1 at 3:13-26.

application software, databases and memory configured with said selected virtual cabinet; and means for modifying said at least one cabinet record through said cabinet visible partition window.²³

34. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.²⁴ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.²⁵

35. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 41-44 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification.

36. In my opinion, one of ordinary skill in the art would look for the word configure (or configuring) in the patent specification to find structure associated with a “mean for configuring.” The word configure of configuring is found in numerous places in the ‘400 patent specification.²⁶ Reference to the words of the claim illustrate that the means for configuring is to configure, or change, memory partitions or data.²⁷ Of particular importance in my analysis was the following section which clearly illustrates that a pointer device such as a mouse can be used to configure the graphical representations of storage or memory by configuring partitions:

The partitions can be virtually copied from the secondary storage to the active cabinet by an input device operation, such as "click and drag" movement using 15 a pointer device such as a mouse, or by double clicking using such pointer device. The pointer device is placed over either icon 180 or text descriptor 181 in Secondary Storage Partitions Window 80, and the "click and drag" or double

²³ Ex. 1 at 9:66-10:25 (emphasis added).

²⁴ Ex. 4 at ¶ 46.

²⁵ Ex. 4 at ¶s 47-38.

²⁶ Ex. 1 at 5:5-35 and 53-59; 7:1-32; and, 8:56-60.

²⁷ See id.

clicking operation of the pointer device places the partition 20 described by icon 180 and text descriptor 181 into the active cabinet. As depicted in FIG. 9, the partition can be removed from the active cabinet by "right clicking" a pointer device over the selected partition, evoking cabinet button 190, and selecting Remover 93. In the preferred embodiment, the 25 Configuration View shown in FIG. 10 allows for the same functions without being limited to the Selected Cabinet. Partitions are moved from the Secondary Storage Partitions Window 80 to the desired Cabinet depicted in Master Cabinet Visible Partition Window 91.²⁸

Further, the '400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the '183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). Further various Figures, including, but not limited to Figures 1-17 of the '400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

37. Therefore, one of ordinary skill in the art would understand that the structure for "means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window" is a pointing device such as a mouse, keyboard, program code or the like for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window.

38. Further, one of ordinary skill in the art would understand that a pointing device such as a mouse, keyboard, program code or the like for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window from the

²⁸ Ex. 1 at 7:13-30.

teaching of the ‘400 patent, the ‘677 patent and the ‘183 patent is a disclosure of structure. Further, the ‘400 patent references prior art systems and programs for creating and displaying subentities.²⁹ Accordingly, on September 29, 1999, one of ordinary skill in the art would recognize a pointing device such as a mouse, keyboard, program code or the like for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window from the teaching of the ‘400 patent, the ‘677 patent and the ‘183 patent as the structure for performing the recited function.

39. Claim 16 of the ‘400 patent further provides:

A graphic user interface for displaying means (sic) for allocating a computer device's resources to at least one operating system on said computer device, said graphic user interface comprising: a secondary storage partitions window for graphically illustrating each of at least one partition of at least one secondary storage device for each of at least one operating systems on said computer; means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window; a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; a cabinet visible partition window for graphically illustrating a selected virtual cabinet record; **means for manipulating said at least one cabinet record through said cabinet visible partition window**; said cabinet visible partition window graphically illustrating an operating system plus application software, databases and memory configured with said selected virtual cabinet; and means for modifying said at least one cabinet record through said cabinet visible partition window.³⁰

40. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.³¹ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.³²

41. In analyzing Mr. Goodin's opinions as expressed in paragraphs 45-48 of his

²⁹ Ex. 1 at 3:13-26.

³⁰ Ex. 1 at 9:66-10:25 (emphasis added).

³¹ Ex. 4 at ¶ 50.

³² Ex. 4 at ¶s 51-52.

declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification.

42. In my opinion, one of ordinary skill in the art would look for the word manipulate (or manipulating) in the patent specification to find structure associated with a “mean for manipulating.” The word manipulate or manipulating is found in numerous places in the ‘400 patent specification.³³ Reference to the words of the claim illustrate that the means for manipulating is to configure, or change, memory partitions or data.³⁴ Of particular importance in my analysis was the following section which clearly illustrates that a pointer device such as a mouse can be used to configure the graphical representations of storage or memory by configuring partitions as discussed in paragraph 36 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.43. Therefore, one of ordinary skill in the art would understand that the structure for “means for manipulating said at

³³ Ex. 1 at 5:5-35 and 53-59; 7:1-32; and, 8:56-60.

³⁴ See id.

least one cabinet record through said cabinet visible partition window" is a pointing device such as a mouse, keyboard, program code or the like for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window.

44. Further, one of ordinary skill in the art would understand that a pointing device such as a mouse, keyboard, program code or the like for means for manipulating said at least one cabinet record through said cabinet visible partition window from the teaching of the '400 patent, the '677 patent and the '183 patent is a disclosure of structure. Further, the '400 patent references prior art systems and programs for creating and displaying subentities.³⁵ Accordingly, on September 29, 1999, one of ordinary skill in the art would recognize a pointing device such as a mouse, keyboard, program code or the like for manipulating said at least one cabinet record through said cabinet visible partition window from the teaching of the '400 patent, the '677 patent and the '183 patent as the structure for performing the recited function.

45. Claim 16 of the '400 patent further provides:

A graphic user interface for displaying means (sic) for allocating a computer device's resources to at least one operating system on said computer device, said graphic user interface comprising: a secondary storage partitions window for graphically illustrating each of at least one partition of at least one secondary storage device for each of at least one operating systems on said computer; means for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window; a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; a cabinet visible partition window for graphically illustrating a selected virtual cabinet record; means for manipulating said at least one cabinet record through said cabinet visible partition window; said cabinet visible partition window graphically illustrating an operating system plus application software, databases and memory configured with said selected virtual cabinet; and **means for modifying said at least one cabinet record through said cabinet visible partition window.**³⁶

³⁵ Ex. 1 at 3:13-26.

³⁶ Ex. 1 at 9:66-10:25 (emphasis added).

46. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.³⁷ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.³⁸

47. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 49-52 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification.

48. In my opinion, one of ordinary skill in the art would look for the word modify (or modifying) in the patent specification to find structure associated with a “mean for modifying.” The word modify or modifying is found in numerous places in the ‘400 patent specification.³⁹ Reference to the words of the claim illustrate that the means for modifying is to configure, or change, memory partitions or data.⁴⁰ Of particular importance in my analysis was the following section which clearly illustrates that a pointer device such as a mouse can be used to configure the graphical representations of storage or memory by configuring partitions as discussed in paragraph 36 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose

³⁷ Ex. 4 at ¶ 50.

³⁸ Ex. 4 at ¶s 51-52.

³⁹ Ex. 1 at 5:5-35 and 53-59; 7:1-32; and, 8:56-60.

⁴⁰ See id.

program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

49. Therefore, one of ordinary skill in the art would understand that the structure for “means for modifying said at least one cabinet record through said cabinet visible partition window” is a pointing device such as a mouse, keyboard, program code or the like for configuring said at least one partition of said at least one secondary storage device through said secondary storage partitions window.

50. Further, one of ordinary skill in the art would understand that a pointing device such as a mouse, keyboard, program code or the like for means for modifying said at least one cabinet record through said cabinet visible partition window from the teaching of the ‘400 patent, the ‘677 patent and the ‘183 patent is a disclosure of structure. Further, the ‘400 patent references prior art systems and programs for creating and displaying subentities.⁴¹ Accordingly, on September 29, 1999, one of ordinary skill in the art would recognize a pointing device such as a mouse, keyboard, program code or the like for modifying said at least one cabinet record through said cabinet visible partition window from the teaching of the ‘400 patent, the ‘677 patent and the ‘183 patent as the structure for performing the recited function.

51. Claim 28 of the ‘400 patent provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple

⁴¹ Ex. 1 at 3:13-26.

operating system, the computer readable program code comprising: *program code for accessing and displaying each of at least one partition of at least one secondary storage device*; program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window; program code for displaying a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; program code for displaying a cabinet visible partition window for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; program code for manipulating said virtual cabinet record through said cabinet visible partition window; and program code for means for modifying said at least one cabinet record through said cabinet visible partition window.⁴²

52. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁴³ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁴⁴

53. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 53-56 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification.

⁴² Ex. 1 at 10:65-11:29 (emphasis added).

⁴³ Ex. 4 at ¶s 55-56.

⁴⁴ Ex. 4 at ¶s 54.

Further various Figures, including, but not limited to Figures 11-14 of the '183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). Further various Figures, including, but not limited to Figures 1-17 of the '400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

54. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

55. Of particular importance in my analysis was the following section which clearly illustrates that a pointer device such as a mouse can be used to configure the graphical representations of storage or memory by configuring partitions:

The partitions can be virtually copied from the secondary storage to the active cabinet by an input device operation, such as "click and drag" movement using 15 a pointer device such as a mouse, or by double clicking using such pointer device. The pointer device is placed over either icon 180 or text descriptor 181 in Secondary Storage Partitions Window 80, and the "click and drag" or double clicking operation of the pointer device places the partition 20 described by icon 180 and text descriptor 181 into the active cabinet. As depicted in FIG. 9, the partition can be removed from the active cabinet by "right clicking" a pointer device over the selected partition, evoking cabinet button 190, and selecting Remover 93. In the preferred embodiment, the 25 Configuration View shown in FIG. 10 allows for the same functions without being limited to the Selected Cabinet. Partitions are moved from the Secondary Storage Partitions Window 80 to the desired Cabinet depicted in Master Cabinet Visible Partition Window 91.⁴⁵

Further, the '400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the '183 patent disclose

⁴⁵ Ex. 1 at 7:13-30.

program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

56. Therefore, one of ordinary skill in the art would understand the structure of program code for accessing and displaying each of at least one partition of at least one secondary storage device and that the disclosure of the natural algorithm is sufficient.

57. Claim 28 of the ‘400 patent further provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple operating system, the computer readable program code comprising: program code for accessing and displaying each of at least one partition of at least one secondary storage device; *program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window*; program code for displaying a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; program code for displaying a cabinet visible partition window for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; program code for manipulating said virtual cabinet record through said cabinet visible partition window; and program code for means for modifying said at least one cabinet record through said cabinet visible partition window.⁴⁶

⁴⁶ Ex. 1 at 10:65-11:29 (emphasis added).

58. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁴⁷ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁴⁸

59. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 57-60 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification. Further, I am informed by counsel that phrases like “program code” have been found by the Courts to connote sufficient structure such that the phrase “program code” is not a means plus function limitation.

60. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

61. Of particular importance in my analysis was the section presented in paragraph 55 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating/configuring the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary

⁴⁷ Ex. 4 at ¶s 59-60.

⁴⁸ Ex. 4 at ¶s 58 and 60.

GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

62. Therefore, one of ordinary skill in the art would understand the structure of program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window and that the disclosure of the natural algorithm is sufficient.

63. Claim 28 of the ‘400 patent further provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple operating system, the computer readable program code comprising: program code for accessing and displaying each of at least one partition of at least one secondary storage device; program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window; **program code for displaying a cabinet selection button bar**; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; program code for displaying a cabinet visible partition window for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; program code for manipulating said virtual cabinet record through said cabinet visible partition window; and program code for means for modifying said at least one cabinet record through said cabinet visible partition window.⁴⁹

64. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁵⁰ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁵¹

65. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 61-64 of his

⁴⁹ Ex. 1 at 10:65-11:29 (emphasis added).

⁵⁰ Ex. 4 at ¶s 63-64.

⁵¹ Ex. 4 at ¶s 62 and 64.

declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification. Further, I am informed by counsel that phrases like “program code” have been found by the Courts to connote sufficient structure such that the phrase “program code” is not a means plus function limitation.

66. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

67. Of particular importance in my analysis was the section presented in paragraph 55 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating/configuring the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

68. Therefore, one of ordinary skill in the art would understand the structure of program code for displaying a cabinet selection button bar and that the disclosure of the natural algorithm is sufficient.

69. Claim 28 of the ‘400 patent further provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple operating system, the computer readable program code comprising: program code for accessing and displaying each of at least one partition of at least one secondary storage device; program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window; program code for displaying a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; ***program code for displaying a cabinet visible partition window*** for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; program code for manipulating said virtual cabinet record through said cabinet visible partition window; and program code for means for modifying said at least one cabinet record through said cabinet visible partition window.⁵²

70. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁵³ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁵⁴

71. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 65-68 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification. Further, I am informed by counsel that phrases like “program code” have been found by the Courts to connote sufficient structure such that the phrase “program code” is not a means plus function

⁵² Ex. 1 at 10:65-11:29 (emphasis added).

⁵³ Ex. 4 at ¶s 67-68.

⁵⁴ Ex. 4 at ¶s 66 and 68.

limitation.

72. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

73. Of particular importance in my analysis was the section presented in paragraph 55 of this declaration. Further, the '400 patent specification specifically provides, in Column 5, lines 16-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the '183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating/configuring the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the '400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

74. Therefore, one of ordinary skill in the art would understand the structure of program code for displaying a cabinet visible partition window and that the disclosure of the natural algorithm is sufficient.

75. Claim 28 of the '400 patent further provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple operating system, the computer readable program code comprising: program code for accessing and displaying each of at least one partition of at least one secondary storage device; program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window;

program code for displaying a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; program code for displaying a cabinet visible partition window for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; ***program code for manipulating said virtual cabinet record through said cabinet visible partition window;*** and program code for means for modifying said at least one cabinet record through said cabinet visible partition window.⁵⁵

76. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁵⁶ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁵⁷

77. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 69-72 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification. Further, I am informed by counsel that phrases like “program code” have been found by the Courts to connote sufficient structure such that the phrase “program code” is not a means plus function limitation.

78. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

79. Of particular importance in my analysis was the section presented in paragraph 55 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one

⁵⁵ Ex. 1 at 10:65-11:29 (emphasis added).

⁵⁶ Ex. 4 at ¶s 67-68.

⁵⁷ Ex. 4 at ¶s 66 and 68.

or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating/configuring the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.80. Therefore, one of ordinary skill in the art would understand the structure of program code for manipulating said virtual cabinet record through said cabinet visible partition window and that the disclosure of the natural algorithm is sufficient.

81. Claim 28 of the ‘400 patent further provides:

A computer program product for use on a computer system with a memory, a display and multiple operating system, the computer program product comprising a computer usable medium having computer readable program code thereon for generating, a graphic user interface on the display device which facilitates manipulation of operating systems, programs and databases in said multiple operating system, the computer readable program code comprising: program code for accessing and displaying each of at least one partition of at least one secondary storage device; program code for configuring said at least one partition of said at least one secondary storage device through a secondary storage partitions window; program code for displaying a cabinet selection button bar; said cabinet selection button bar graphically representing at least one virtual cabinet record; each said at least one virtual cabinet record representing a discrete operating system; program code for displaying a cabinet visible partition window for graphically illustrating, at least one cabinet record, each of said at least one cabinet record representing an operating system plus application software, databases and memory configured with said selected virtual cabinet record; program code for manipulating said virtual cabinet record through said cabinet visible partition window; and ***program code for means for modifying said at least one cabinet record through said cabinet visible partition window.***⁵⁸

⁵⁸ Ex. 1 at 10:65-11:29 (emphasis added).

76. Mr. Goodin opined that the ‘400 patent discloses no algorithm for performing the function emphasized in Claim 16.⁵⁹ He further opined that one of ordinary skill in the art would not be able to connote a definite, particular structure for performing the recited function.⁶⁰

77. In analyzing Mr. Goodin’s opinions as expressed in paragraphs 69-72 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of U.S. Pat. No. 6,401,183 (“the ‘183 patent”). In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on September 29, 1999 and how one of such skill would understand the claim terms and corresponding description in the specification. Further, I am informed by counsel that phrases like “program code” have been found by the Courts to connote sufficient structure such that the phrase “program code” is not a means plus function limitation.

78. In my opinion, one of ordinary skill in the art would look at the natural language algorithm for disclosure as provided in paragraph 21 of this declaration.

79. Of particular importance in my analysis was the section presented in paragraph 55 of this declaration. Further, the ‘400 patent specification specifically provides, in Column 5, lines 17-22, that the resources of a computer system, such as defining one or more cabinets containing one or more partitions of software and/or other data, is performed graphically with a keyboard and/or mouse. Further various Figures, including, but not limited to Figures 11-14 of the ‘183 patent disclose program code or algorithms in the way of flowcharts and Figures 3-10 and 15-19 contain block diagrams of data structure(s). One of ordinary skill in the art would be able to create the program code necessary for creating and manipulating/configuring the disclosed graphics. Further various Figures, including, but not limited to Figures 1-17 of the ‘400 patent disclose exemplary

⁵⁹ Ex. 4 at ¶s 75-76.

⁶⁰ Ex. 4 at ¶s 74 and 76.

GUIs with graphical representations capable of being programmed for display by one of ordinary skill in the art and Figures 16 ad 17 present exemplary examples of properties of partitions associated data displayed on the GUI.

81. Therefore, one of ordinary skill in the art would understand the structure of program code for means for modifying said at least one cabinet record through said cabinet visible partition window and that the disclosure of the natural algorithm is sufficient.

THE ‘677 PATENT

82. The ‘677 Patent is directed to “a method of managing a computer system … rapid switching among operating systems (“OS”) [on] a computer having multiple installed operating systems.”⁶¹

83. Claim 1 of the ‘677 patent provides:

A hardware platform for a hibernate capable computer system comprising a system manager, said computer system having an OS-independent storage manager operating through a firmware level and a plurality of operating systems and applications, said storage manager having a virtual table of contents for organizing and accessing a plurality of partitions of relevant data and having a plurality of virtual computer systems, each of said virtual computer systems capable of accessing a selection of the partitions, the virtual table of contents (VTOC) being capable of dynamically configuring a plurality of partition tables, said system manager comprising: *means for selecting one of said virtual computer systems to become next operable before suspending a currently operational virtual computer system*; means for suspending the currently operational virtual computer system in an active state; means for making the selected virtual computer system operable into a running state, and means for switching of the virtual computer systems using a switch flag and BIOS ACPI solutions, and without initialization of power-on self test (POST) in the BIOS, wherein the switch flag is a flag that is set up in storage to differentiate between suspend for fast switching and power save suspend.⁶²

84. Mr. Goodin opined that the emphasized phrase “means for selecting one of said

⁶¹ Ex. 2 at 6:39-42.

⁶² Ex. 2 at 16:5-29 (emphasis added).

virtual computer systems to become next operable before suspending a currently operational virtual computer system” is not enabled by a disclosure of structure or algorithm⁶³ and does not connote a definite, particular structure for performing the recited function to one of ordinary skill in the art⁶⁴ and that the function disclosed could not be performed on a general purpose computer⁶⁵.

85. To analyze Mr. Goodin’s opinions as expressed in paragraphs 80-83 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of the ‘183 patent. In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on October 19, 2001 and how one of such skill would understand the claim terms and corresponding description in the ‘677 patent specification.

86. Of particular importance in my review of the material for support were the consistent and repeated usage by the ‘677 patent of how it accomplishes what it refers to as fast switch/fast suspend by using BIOS ACPI enhancements/solutions with a switch flag and VTOC Data Structure, but without initialization of power-on self-test (POST) in the BIOS, or equivalents thereof.⁶⁶ One of ordinary skill in the art would understand this as a definite and particular structure for performing the function of selecting one of said virtual computer systems to become next operable before suspending a currently operational virtual computer system.

87. Claim 1 of the ‘677 patent further provides:

A method of managing a computer system having a plurality of operating systems, a plurality of virtual computer systems, and a virtual table of contents (VTOC) capable of dynamically configuring a plurality of partition tables for fast switching between the virtual computer systems, each of said operating systems configured on a corresponding one of said virtual computer systems and operable within the

⁶³ Ex. 4 at ¶ 81 and 83.

⁶⁴ Id. at ¶ 82-83.

⁶⁵ Id. at ¶ 83.

⁶⁶ Ex. 2 at 3:17-4:29; 4:33-55; 5:4-14; 5:28-6:5; 8: 15-9:16; Figures 1-13 and 12; 6:39-57; 9:58-10:8.

corresponding one of said virtual computer systems, said method comprising: providing a *selection means for sequentially choosing from among said plurality of operating systems*; initiating a first selected operating system; fast suspending said first selected operating system; and executing a subsequent selected operating system; said method utilizing a switch flag and BIOS ACPI enhancements without requiring initialization of power-on self-test (POST) in BIOS, wherein the switch flag is a flag that is set up in storage to differentiate between suspend for fast switching and power save suspend.⁶⁷

88. Mr. Goodin opined that the emphasized phrase “selection means for sequentially choosing from among said plurality of operating systems” is not enabled by a disclosure of structure or algorithm⁶⁸ and does not connote a definite, particular structure for performing the recited function to one of ordinary skill in the art⁶⁹ and that the function disclosed could not be performed on a general purpose computer⁷⁰.

89. To analyze Mr. Goodin’s opinions as expressed in paragraphs 84-87 of his declaration, I reviewed the ‘400 patent specification, the ‘677 patent specification and the specification of the ‘183 patent. In addition to the material I reviewed I considered the knowledge of one of ordinary skill in the art on October 19, 2001 and how one of such skill would understand the claim terms and corresponding description in the ‘677 patent specification.

90. Of particular importance in my review of the material for support were the consistent and repeated usage by the ‘677 patent of how it accomplishes what it refers to as fast switch/fast suspend by using BIOS ACPI enhancements/solutions with a switch flag and VTOC Data Structure, but without initialization of power-on self-test (POST) in the BIOS, or equivalents thereof.⁷¹ One

⁶⁷ Ex. 2 at 16:34-53 (emphasis added).

⁶⁸ Ex. 4 at ¶ 81 and 83.

⁶⁹ Id. at ¶ 82-83.

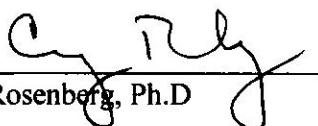
⁷⁰ Id. at ¶ 83.

⁷¹ Ex. 2 at 3:17-4:29; 4:33-55; 5:4-14; 5:28-6:5; 8: 15-9:16; Figures 1-13 and 12; 6:39-57; 9:58-10:8.

of ordinary skill in the art would understand this as a definite and particular structure for performing the function of selection means for sequentially choosing from among said plurality of operating systems.

I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Executed on Sept 7th, 2016


Craig Rosenberg, Ph.D.